DOCUMENT RESUME

ED 278 242 FL 016 375

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TITLE Access to International Television.
PUB DATE 85
NOTE 9p.; In: Gillespie, Junetta B., Ed. Video and Second Language Learning. Urbana, Language Learning Laboratory, University of Illinois at Urbana-Champaign, 1985; see FL 016 373.
PUB TYPE Reports - Evaluative/Feasibility (142) -- Journal Articles (080)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Archives; Audiovisual Aids; *Electronic Equipment; Equipment Evaluation; *Equipment Standards; Foreign Countries; Higher Education; Programing (Broadcast); *Projection Equipment; Second Language Instruction; *Television; Videotape Recorders; Videotape Recordings
IDENTIFIERS *International Television; *University of Iowa

ABSTRACT

While access to international television and videotapes would provide important support to foreign language curricula, foreign television generally cannot be received, recorded, duplicated, or even played on American equipment due to differences in technical standards, norms, and format. There are five basic solutions to problems of foreign videotape playback, including using tapes from countries with similar standards and norms, purchasing a videotape recorder in a foreign country, using an image translator to re-record the tapes, using a multistandard recorder, and converting the tapes to a U.S. standard. International television materials can be acquired through established distribution networks. The University of Iowa has also formed the Project for International Communication Studies to provide assistance and access to reasonably priced standard transfers and eventually to provide an archive of international videotapes for scholarly purposes. (MSE)

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ACCESS TO INTERNATIONAL TELEVISION

Rick Altman[1]

While access to international television and video tapes would provide important support to foreign language curricula, unlike films, radio broadcasts, and printed texts, foreign television (with some exceptions) cannot be received, recorded, duplicated, or even played on American equipment due to differences in standards and norms. Problems that may be encountered in attempting to play imported tapes are discussed, as are several possible solutions, including acquisition of multistandard playback equipment and standard transfers. The Project for International Communication Studies at the University of Iowa has been formed to provide assistance and access to reasonably priced standard transfers, and eventually to provide an archive of international video tapes for scholarly purposes.

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Why, in this global village, do university professors of history regularly use German films in their courses, French professors use recorded foreign radio broadcasts, and political science professors use Spanish newspapers, but not one professor in ten thousand uses video tapes recorded abroad to provide curriculum support? The answer lies in one all-important but little-known fact: whereas previous media were easily transferable interculturally (Berkeley projectors can play German films, Boston radios can pick up French-Canadian broadcasts, Spanish newspapers need no special treatment to be read in New Haven), foreign television broadcasts can by and large neither be received, recorded, duplicated, nor even played on American televisions.

For the video signals emitted in the United States are as different from those used in other countries as an AM radio signal is from an FM transmission. The US system, known as NTSC (National Television Systems Committee), is limited to North America, some South American countries, and a few Far Eastern countries. It is completely incompatible with the two other systems, PAL (Phase Alternate by Line) and SECAM (Séquence de couleurs avec mémoire), which together split the rest of the world. This means that a teacher returning home with various materials destined for use in a German language course will be able to use all the newspapers, magazines, photos, slides, films, records, and audio cassettes, but any video cassettes carried home will be useless. Worse yet, the university fortunate enough to possess an antenna capable of capturing foreign TV signals (i.e. from a satellite) would be no further along, since none of the receivers or video-tape recorders commonly sold in the United States will play or record the incoming signal. Even the rather obvious expedient of bringing a video-tape recorder back from abroad solves nothing, since the receiver or monitor as well as the VTR must correspond to the standard in which the tape was recorded (and this goes for commercially recorded tapes just as it does for home off-air recordings). To make things worse, even the enterprising individual willing to pay international freight for VTR and TV alike will have to contend with familiar problems of electrical current difference--110 volts and 60 cycles in the U.S., but commonly 220/240 volts at 50 cycles throughout the rest of the world.

BASICS

Much time and many heartaches will be saved if the potential user of foreign television materials will keep in mind the following three categories, making sure that the characteristics of acquired tapes correspond in all three categories to available playback equipment.

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1. Rick Altman is co-director of the Project for International Communication Studies and Associate Professor of Film, French and Comparative Literature at the University of Iowa. He was recently decorated by the French government for his work in the field of international television.

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BEST COPY AVAILABLE

Standard

The color standard of a video tape may be NTSC, PAL, or SECAM. This is the way the color information is encoded in the video signal. While it is sometimes possible to obtain a black-and-white image from the wrong playback equipment, proper color playback always requires matching of tape and playback standard.

Norm

The norm of a video tape may be B, G, I, K, L, M, N (and other letters less frequently). Whereas the standard designates the mode of color encoding, the norm designates the method of transmitting all other information necessary to a complete picture/sound combination. While it is not usually necessary to have information about the norm when purchasing and playing video tapes, understanding differences between norms can often help you figure out just what a particularly obtuse salesman (or a knowledgeable technician) is trying to say. On the surface, it might seem that British, German, and Italian systems would produce interchangeable receivers, video-tape recorders, and video tapes, since all share the PAL standard. Yet the British system (PAL I) carries its audio signal at a different frequency from the German and Italian systems (PAL BG). Buying a TV in one country and expecting to use it in the other would leave you about as satisfied as the unlucky purchaser of a powerful new radio with a stuck tuning dial. By and large, however, this problem should not afflict American educators who work only with video tapes rather than with direct broadcasts.

There does exist one situation, however, where knowledge of norms is utterly essential. While the French, the Soviet Union, and Arab countries from Tunisia to Saudi Arabia share the French-developed SECAM system, each of these areas has a different norm: L for France, K for the USSR, and BG for the Middle East. Unfortunately, due to American preference for Arab oil over French Camembert, the majority of multistandard video-tape recorders on the market today have been engineered to handle SECAM BG (the Arab version) rather than SECAM L (the French original) or SECAM K (the sophisticated Soviet modification). If your goal is to use video materials to enliven your French classes, then you had best be prepared to ask some hard questions of the salesman who glibly assures you that "of course it plays SECAM, and France is SECAM, right, so it'll play French stuff. No problem." No problem for him, anyway.

Format

The format of a video tape (U-Matic, VHS, Beta, or V-2000) must also be considered. Don't let the complexities of standard and norm make you forget the obvious problem of physical size and shape of the tape and cassette. The only current three quarter-inch format is the U-Matic cassette, more common for industrial or professional use than the typical half-inch home VTR formats. Besides VHS (the world leader, with approximately 70% of the total half-inch market) and Beta (a distant second in nearly every country in the world), look out for the Phillips flippable format, V-2000. Outside of Germany and Holland, where it beats out Beta for second place, V-2000 tapes and VTRs are extremely rare, so don't get stuck with an "Edsel".

Besides these three all-important categories, there are a few other variables of some importance. I have already mentioned questions of current, which shouldn't be a problem if you plan to use a player sold in this country, but beware of the VTR you bring home from another country--you'll be able to solve the voltage problem with your trusty transformer, but you'll be out in the cold on the cycle difference (and since the cycle rate governs the image's field and frame rate, you'll never see a proper image). The question of tape speed also merits a word in passing. Users of NTSC machines are accustomed to choosing among three speeds for their recordings (normally designated in VHS as SP, LP, and EP, and in Beta as I, II, or III, according to the number of hours that can be squeezed onto a tape). Neither PAL or SECAM, however, possesses this option, in part because both PAL and SECAM run at a

speed that is different from the basic NTSC speed, corresponding to three hours of recording for a standard two-hour tape at slow NTSC speed.

PLAYING FOREIGN VIDEO TAPES IN THE U.S.

For those who are hardy (and stubborn) enough to insist on overcoming the inherent difficulties involved in playing foreign video tapes in this country, there are five basic solutions, each with its own special advantages and pitfalls.

1. For many, it should be recognized, the problems associated with varying standards and norms will never need to be confronted, for there are numerous countries which share the American standard, thus producing commercial video tapes and off-air recordings which are perfectly compatible with U.S. machines. These include our neighbors Canada and Mexico, nearly all of Central America and the Caribbean, and west coast countries of South America (Columbia, Ecuador, Peru, Chili), plus Bolivia, Venezuela, and Surinam. Also using NTSC are a number of important Far Eastern countries (Japan, South Korea, Taiwan, the Philippines, and Burma). In other words, if all your work is with Latin American or Far Eastern cultures or languages, you may not need to read any farther.
2. For the few lucky academics who receive a shipping allowance when they return home from abroad, purchasing a video-tape recorder in a foreign country may prove to be a reasonable solution. Before you invest in SECAM in Paris or PAL in Rome, however, consider the following. First, a VTR is not enough; you must bring back the much heavier monitor or receiver as well--without it your Roman PAL machine will never give you Rossellini in Rochester. Second, remember to acquire machines that will run on 110 volts and 60 cycles. Finally, think about what you are going to do when your setup refuses to function properly. Not only is your warranty useless in this country, but chances are there is no one within five thousand miles who can repair your machines, let alone obtain necessary parts. All things considered, use your shipping allowance for Florentine leather boxes or French antiques. You will save yourself heartaches in the long run. Take it from someone who learned the hard way.
3. Perhaps the simplest way to solve the standards problem has been pioneered by a small Florida company named Instant Replay (2980 McFarlane Road, Suite 210, Coconut Grove, FL 33133; phone: (305) 448-7088). For under $500 this outfit will modify your own VTR with a device they call the Image Translator (or they will sell you a basic Quasar or Panasonic unit for around $1,000 with the Image Translator already installed). What this bit of electronic wizardry permits you to do is to put your German VHS tape in your modified American VTR and see the picture on an unmodified American television. In terms of simplicity, this is clearly the ultimate solution. Not surprisingly, however, there are some drawbacks. The biggest problem for us Francophiles is that the Image Translator is really designed more for PAL sources than for SECAM. While PAL tapes play in color, SECAM tapes play only in black and white. Nor is the picture as crisp as many people would prefer (though for language teaching it is certainly adequate, especially since it is accompanied by an unmodified original sound track). What happens if you have repair problems I can't say, but my experience suggests that local facilities usually avoid modified machines.
4. For most, it seems clear, the best solution will be the multistandard video-tape recorder bought in this country. Varying from the PAL/SECAM machines sold in border regions throughout the world to five-system extravaganzas with instruction books in Arabic, the multistandard video-tape recorder can be an extraordinary teaching aid, but it can also create headaches without number for the naive buyer. The difficulties involved in buying a multistandard video-tape recorder nearly all stem from one fatal flaw of international distribution: the companies that make the machines in many cases refuse to import them into the U.S., thus immensely complicating questions of product information, warranty coverage, parts availability, and so forth. Call Hitachi USA and they will tell you that Hitachi does not make multistandard machines for sale in the United States. Try Akai and you will get the same

answer. Yet I work with a Hitachi multistandard receiver and an Akai multistandard VTR at home, and the University of Iowa has half a dozen in its language building. Call 50 reputable video dealers around the country and you will find only 10 who claim to be willing to sell you a multistandard VTR. Five of these will have only one brand, two will "know where they can get just the machine you need" (but they'll still be saying the same thing a month later), two will have a tantalizing choice of overpriced machines, but next to no information on what each one does, and the remaining dealer will be the only one who can really answer all your questions about technology--but all of his superlatives will be reserved for the model he used to have but can't get any more. Somewhere in that pack is all the information you need as well as the one recorder that matches your needs perfectly, but my experience suggests that you are unlikely to find those two desiderata met by a single phone call.

What should you look for in a multistandard video-tape recorder? In terms of features, the choice should of course depend on the use to which you plan to put the VTR. Whatever your particular needs, however, be sure to follow the cardinal rule of multistandard VTR purchase: make absolutely sure that the machine you are buying will play the video cassettes to which you have access. As a general rule video vendors know more about domestic machines than the more complex multistandard affairs, so they will not necessarily have all the right information on the tips of their tongues. What's more, most of the dealers who handle international television products sell primarily by mail to customers who are suspicious of anything but "factory-fresh merchandise in unopened cartons". In short, many salesmen would rather sell you an unopened carton than open the carton to check out the operating instructions in order to answer questions over the phone. Whatever you do, make sure that you have the right to return the unit if it will not in fact play your tapes. The same goes for warranties. Don't let a vendor tell you that there is no warranty at all. Serious outfits will insist that their suppliers provide them with a proper warranty, along with information about parts sources and repair facilities. It's easier for a dealer to get this information than it is for you, yet you're the one who will suffer if your unit stops working and no local service center will attempt a repair.

During the years that the University of Iowa has been working with multistandard VTRs, we have been in contact with numerous vendors and bought from two. Besides learning to solicit information about warranties and repair facilities, we have grown increasingly aware of the need to ascertain whether a vendor is touting a machine he actually has on hand, or only one which he's heard of, or thinks he can get, or hopes he can find. If salesmen often know little about the capacity of machines they have on hand, then how much less will they know about units they have never seen? Months can be lost waiting for a non-existent machine to come over the horizon. The list of suppliers appended to this article, while hardly exhaustive, may help you to locate the units you need.

Besides those listed there are certainly many others. In particular, the three-quarter-inch market is totally separate from the half-inch market, in that manufacturers tend to sell and support their own three-quarter-inch machines to a professional clientele. If you (or your language lab) are interested in three-quarter-inch equipment, the best approach is simply to call the major manufacturers (Sony, Panasonic, etc.) and get locations for retail outlets.

I wish I could say that there are numerous machines that will handle the typical problems of a globe-trotting, multilingual academic. There aren't. Two years ago, we bought the first machine to come on the market that could handle NTSC, PAL, and SECAM (including French SECAM)--the Akai VS-2EGN--with the conviction that many other similar machines would follow. The sad truth is that only one other machine, to my knowledge, has replicated, let alone superseded the VS-2EGN, and to make matters worse, Akai has taken that unit out of production. I understand from Sam Fuhrer that there is now a VS-3EGN, but it does not quite do everything that the VS-2 did (in particular, it will not record NTSC). Panasonic's most advanced unit still plays French SECAM tapes in black and white only. The new Hitachi top-of-the-line model, however, promises to carry multistandard VHS technology a step forward. A four-head machine with wireless remote control and Dolby noise reduction, this unit reportedly handles all the major standards and norms, and even provides three

speeds (2, 4, 6) for the recording and playback of NTSC tapes (the first multistandard machine to do so).

By and large, we have been very happy with the Akai, coupled to either a Hitachi 19" multistandard receiver (CMT 2060, which has of course also been replaced by a new model) or to a small Sony monitor. The resolution is of course not as good as on a high-quality single standard monitor (after all, the same screen has to handle the 525-line display of NTSC along with the 625-line configuration of PAL and SECAM), but we have subjected half-a-dozen setups to two years of students, research assistants, and faculty members without (knock on wood) a single minute of down time.

Surprisingly, the complexity of multistandard equipment does not drive prices out of sight. Expect to pay for a multistandard VTR about what you would pay for a commercial quality VTR (in the neighborhood of $1,000--though Fuhrer and International Wholesalers alike list some models for substantially less), while the monitor or receiver varies from $500 to $1,000, depending on size and quality (e.g. Fuhrer quotes a 20" Sony Trinitron 5-system receiver at $700). In short, you can equip your language lab for about the same price you would pay for a commercial quality VTR and monitor--and you can grace your living room with the same setup for little more than a typical home VTR/color TV combination.

5. While the multistandard VTR/TV combination provides an acceptable solution for home or occasional class use, it has serious drawbacks as a basis for general curricular use. Consider the case of the college teacher who recorded a program off the air in France for use in her civilization course back home. She talked her language lab into buying multistandard equipment which her 16 students employed with quite satisfactory results. So far so good. When our civilization teacher's language-coordinator colleague saw the program, however, the difficulties began. He decided that parts of one tape were perfect for the 12th week of the second-year program. Accordingly, he persuaded the dean to buy three more multistandard setups for the lab. While the lab director was delighted to have the added machines, she was in a quandary about copyright concerns. If she was uncomfortable about keeping the original tape longer than fair use standards dictate, she was quite certain that the university had no right to make and use multiple copies. Furthermore, she was experienced enough to know that copies made by hooking up one half-inch VTR to another leave a great deal to be desired in terms of quality (a problem which is only compounded by the inevitable losses in fidelity associated with multistandard equipment). After a few years of using sub-par copies in the second-year program, the language coordinator chose the conservative road and went back to using feature films in NTSC, in spite of his conviction that they are by and large too old, too long, and too difficult. But his fate was nothing compared to that of the poor civilization teacher. The precious tapes which she had begged and borrowed from all her friends in France were one day visited by the proverbial klutzbird: one was erased, one was torn and twisted, and another had the final minutes of the Rose Bowl recorded over the end of the Mitterrand-Giscard d'Estaing debate.

Moral of the story: a significant problem of scale exists with foreign video use. The minute your tape has to be used by a class other than your own, it must either be copied or handled by someone less trustworthy than yourself. One way to overcome some of the difficulties of scale is to bypass the multistandard approach entirely, converting PAL and SECAM tapes to NTSC rather than playing them in their original standard. Now, before you shriek "Eureka! Why didn't he tell us that was possible to begin with?" you might like to consider the economics of the conversion approach. Effected by a professional-quality device that costs close to $100,000, standards conversion (or transcoding, as it is often called) costs anywhere from $200-$250 per hour when obtained from one of the few commercial laboratories equipped for standards conversion. Quite obviously, this approach does not constitute a real solution for any but the most precious and essential materials. Nor does purchase of a standards converter appear a likely option for most campuses.

Nevertheless, at the University of Iowa, we have for two years been building our programs in international and foreign language education around a standards conversion approach. While we continue to use multistandard equipment for preview, selection, and research purposes, we no longer give students (or classroom instructors, for that matter) access to original PAL or SECAM material. Instead, all programs destined for student consultation or classroom use are converted to NTSC, a process which involves minimal loss of fidelity (thus facilitating the creation of multiple copies when pedagogical circumstances and copyright clearances warrant). Since access to originals can be restricted, we have succeeded in avoiding tape erasure, breakage, and excessive wear. At the same time, we have been able to make tapes available to anyone with a VHS player. Eventually, the conversion approach will facilitate campus-wide distribution of international television materials through the library, the International Center, the Foreign Language House, and the Language Media Center.

Now, it is of course utopic to think that the solution adopted at the University of Iowa will suit more than a handful of large, internationally oriented universities. (Indeed, we know of no other university equipped for standards conversion.) For this very reason, and to the end of fostering cooperation in materials collection and development, the University administration has agreed to make access to standards conversion available at cost to other educational institutions under certain conditions. If you have material to which you own the copyright, or for which you have copyright clearance, we will be pleased to arrange for standards conversion at cost (at present approximately $25/hour plus blank tape) if you will give us permission to make a copy for our growing international television archive. Eventually, with the help of outside grant money and continued University support, we expect to be able to open this archive to researchers and teachers from other institutions. In every case, however, use of archived materials will be restricted to use at the University of Iowa.

ACCESS TO INTERNATIONAL TELEVISION MATERIALS

Being able to play video tapes from abroad may facilitate use of materials you have already acquired or that an occasional visiting lecturer may bring, but it hardly solves the general problem of access to materials appropriate for use in a broad range of courses throughout the curriculum. Here again, numerous strategies have been tried, most with a frustrating mixture of success and failure. Fortunately, however, this is a rapidly developing field, one which will have changed radically by the end of the decade. The approaches outlined here are thus eventually to be supplemented by new access channels bound to open up in coming years.

By far the most common approach to acquiring international television materials in the past has been to depend on already established distribution networks in this country, primarily those associated with feature films. Indeed, there is a growing fund of film materials available for purchase by individuals and institutions alike. In addition, commercial catalogues are usefully complemented by the rental collections of the various consular services (FACSEA, Goethe Institute, Japan Foundation, etc.). Nevertheless, it must be recognized that feature films have severe drawbacks as teaching devices. Besides being too long for comfortable classroom use, they often present a skewed view of the culture, unduly many linguistic difficulties (slang, technical vocabulary, in-jokes, etc.), and, all too often, a well worn sound track that compounds the other felonies.

Increasingly, short video tapes from both American and foreign sources are coming onto the market. Often designed specifically for language instruction, these entries promise to solve many of the problems traditionally associated with feature films. At the University of Iowa, for example, we have produced four short films of the "Little Red Riding Hood" story for use in our second-year German and French classes (the Perrault version, in both German and French, with images from the Epinal folk tradition; the Grimm version, in both German and French, from modern German drawings). Soon to be distributed for use at other campuses around the country, these short

films are especially appropriate for classroom use in lower-level language courses. Like foreign feature films distributed in this country, they are available in NTSC for use on American standard video-tape equipment.

For the more adventuresome, the obvious sources are to be found abroad. Besides off-air recording (done by a friend, on a rented VTR, or as part of an exchange), many other sources should be considered. From home movies to commercially distributed video tapes, nearly every country now offers a broad spectrum of video materials to the innovative and assertive instructor. Foreign commercial sources in particular deserve a long look, since they offer unsubtitled materials, often including the items of topical or cultural interest that American distributors systematically eschew. Be warned, however, that most foreign video-tape outlets will not send prerecorded tapes to addresses outside of their country (usually for copyright reasons). This is where a friend on the spot can make an enormous difference.

Beyond traditional American film sources and direct acquisition in foreign countries, there remains one alternative which promises in the not too distant future to provide a wider selection of materials especially appropriate for pedagogical use. Over the years, numerous attempts have been made to provide direct access in the US to foreign television materials. The French, for example, not only sponsored the short-lived but spectacular Telefrance, they also tried (through the now defunct agency entitled Interaudiovisuel) to make selected French television programs available on video tape to American educational institutions; indeed they even attempted to beam French news to interested public television stations through an international hookup in Boston. Yet today, with the exception of the Spanish International Network on cable, a rare local program in major metropolitan centers, and French, Spanish, and Russian via satellite to those with receiving equipment, there is nothing but English on American televisions.

In order to rectify this situation, the University of Iowa has begun to work with foreign governments and television producers to make selected programs available for educational use on a rental or lease basis. Initially from France, Germany, Spain, and perhaps Italy, available programs will include everything from monthly news compilations and documentaries to children's programs, serials, game shows, and other examples of each country's programming. While a limited selection of programs will be available for the 1985-86 school year, we expect to begin broad distribution of a wide range of programs only during the 1986-87 school year. Distributed on a choice of formats in NTSC, these programs will in general be without subtitles, as they appeared in their country of origin (though some programs will be available as well in a subtitled version). In many cases, scripts and/or classroom materials will be supplied with the video tapes. Eventually, we hope to develop a national clearing house not only for the collection and distribution of educational-use international television, but also for the development and distribution of pedagogical materials meant to accompany specific video tapes.

In an important way, the questions addressed in these pages are the wrong ones. What we should really be talking about is how to use foreign television programming in our teaching (not only in the teaching of language, but across the curriculum, from journalism to linguistics, and from political science to women's studies). Unfortunately, before these all-important questions can be addressed, the practical concerns of technology and access to programming must be solved. At the University of Iowa, we are anxious to share our experience with others interested in this fast-developing field. As the recipient of a U.S. Department of Education Undergraduate International and Foreign Language Program grant, we have had the opportunity to develop pedagogical strategies for the use of international television in numerous departments across the campus. Primary among methods used has been the extremely flexible computer/video interactive system, which allows video tapes to be exploited fully in a way that is challenging for students yet economical for instructors. As we move into the next stage of our activities, the constitution of a national consortium for the exploitation of international television materials, we look forward to establishing contact with other teachers or researchers interested in any aspect of international television. If our experience can be of help to you, if you are interested in our standards conversion or distribution services, or if you would like to share your experience with us, please write to the Project for International Communication Studies,

University of Iowa, Jefferson Building, Iowa City, IA 52242. As co-directors of PICS, Jim Pusack and I will be pleased to learn of your interest.

PARTIAL LIST OF SUPPLIERS OF PAL, SECAM, AND MULTISTANDARD EQUIPMENT

ABACO International Shippers, Inc.
2020 North Racine Avenue
Chicago, IL 60614
Tel: (312) 871-6100

Specializing in sales to departing servicemen and other personnel, ABACO carries a surprising variety of merchandise (right up to multistandard projection televisions). We have not bought from them because they provided no warranty, but that may have changed now.

47th Street Photo
67 West 47th Street
New York, NY 10036
Tel: (800) 221-7774; 223-5858; 223-5661

One of the big advertisers in the Sunday *New York Times*, 47th Street Photo usually includes a selection of multistandard machines in its catalogues. Certainly worth checking out.

Sam Fuhrer (The Cartridge King)
825 West End Avenue
New York, NY 10025
Tel: (212) 749-0961

We have bought numerous machines from Fuhrer, who returns calls quickly after you leave a message. While Fuhrer is not a technician, he is a former academic with an interest in expanding his university business. We have found him prompt, straightforward, and in general quite helpful.

Intercontinental Televideo Inc.
13 West 36th Street
New York, NY 10018
Tel: (212) 947-9097

While I only spoke to this outfit once (their prices at the time seemed high to me), they appear to have a solid interest in the multistandard market.

International Wholesalers of Miami
17866 Ipco Road
NE 5th Avenue
North Miami Beach, FL 33162
Tel: (800) 327-0596

We have bought units from International Wholesalers on more than one occasion. While their prices tend to be very good, it is not always possible to distinguish between machines which they have on hand, and which can be delivered immediately, and machines that need to be ordered from elsewhere, thus entailing potentially prolonged delays.